Parallel Lines have so much in common, it’s a shame they will never meet.

Do Now: Draw a picture description for each of the following terms:

|  |  |  |
| --- | --- | --- |
| Parallel Lines  | Coplanar lines that do not intersectSymbol:  |  |
| Parallel planes  | Planes that do not intersect  |  |
| Transversal | A line that intersects two or more coplanar lines at distinct points.  |  |
| Perpendicular lines  | Line that’s intersect and form right angles  |  |
| Two parallel Lines cut by a transversal | Two parallel lines that are both intersected by another line |  |

**Lesson 1 Practice:**

Step 1: Draw a picture

Step 2: Fill in the blank

In a plane, if a line is perpendicular

to one of two parallel lines, then it is also

In a plane, if two lines are perpendicular

to the same line, then they are

**Example 1**: Fill in the correct symbol $∥or⊥$



t \_\_\_\_\_\_ p

t \_\_\_\_\_\_ q

p \_\_\_\_\_\_ q because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Example 2:** Draw a picture and answer the following question.

Main street intersects Avenue A and Avenue B. Avenue A is parallel to Avenue B. Avenue A is also perpendicular to Main street. How are Avenue B and Main Street related?